

The invention claimed is as follows.

1. A method for loading an aircraft having a hold disposed at predetermined elevation, comprising the steps of:

providing a first loading platform having a transfer for moving cargo in a generally horizontal direction, and a powered lift to raise and lower the first loading platform between first and second elevations;

positioning a load on the first loading platform at the first elevation;

shifting the first loading platform upwardly to the second elevation to lift the load thereon;

providing a second loading platform having a transfer for moving cargo in a generally horizontal direction, and a powered lift to raise and lower the second loading platform between the second elevation and the predetermined hold elevation above the second elevation;

transferring the load from the first loading platform at the second elevation to the second loading platform at the second elevation;

shifting the second loading platform upwardly from the second elevation to the predetermined hold elevation; and

transferring the load from the second loading platform into the hold of the aircraft.

2. A method as set forth in claim 1, wherein:

said second loading platform shifting step includes raising the second loading platform a distance in the range of 50-100 percent of the distance between the first and second elevations.

3. A method as set forth in claim 2, wherein:

said first loading platform shifting step includes raising the first loading platform from a height adjacent to ground level to a height of around six meters above ground level; and

said second loading platform shifting step includes raising the second loading platform a distance in the range of 4.00-8.50 meters above ground level.

4. A method as set forth in claim 3, wherein:

said first loading platform providing step includes supporting the first loading platform on a first aircraft loading device; and

said second loading platform providing step includes supporting the second loading platform on a second aircraft loading device.

5. A method as set forth in claim 4, including:

providing the first and second aircraft loading devices with separate vehicles.

6. A method as set forth in claim 5, wherein:

said second loading platform transferring step comprises providing a transfer bridge to transfer the load on the second loading platform into the hold of the aircraft.

7. A method as set forth in claim 1, wherein:

said first loading platform shifting step includes raising the first loading platform from a height adjacent to ground level to a height of around six meters above ground level; and

said second loading platform shifting step includes raising the second loading platform a distance in the range of 4.00-8.50 meters.

8. A method as set forth in claim 1, wherein:

said first loading platform providing step includes supporting the first loading platform on a first aircraft loading device; and

said second loading platform providing step includes supporting the second loading platform on a second aircraft loading device.

9. A method as set forth in claim 1, including:

providing the first and second aircraft loading devices with separate vehicles.

10. A method as set forth in claim 1, wherein:

said second loading platform transferring step comprises providing a transfer bridge to transfer the load on the second loading platform into the hold of the aircraft.

11. A method for unloading an aircraft having a hold disposed at predetermined elevation, comprising the steps of:

providing a second loading platform having a transfer for moving cargo in a generally horizontal direction, and a powered lift to raise and lower the second loading platform between the predetermined hold elevation and a second elevation;

positioning a load on the second loading platform at the predetermined hold elevation;

shifting the second loading platform downwardly to the second elevation to lower the load thereon;

providing a first loading platform having a transfer for moving cargo in a generally horizontal direction, and a powered lift to raise and lower the first loading platform between the second elevation and a first elevation below the second elevation;

transferring the load from the second loading platform at the second elevation to the first loading platform at the second elevation;

shifting the first loading platform downwardly from the second elevation to the first elevation; and

removing the load from the first loading platform.

12. A movable aircraft cargo handling apparatus for loading and unloading an aircraft having a predetermined load level, comprising:

a first movable aircraft cargo handling device having a loading platform with a transfer for moving cargo in a generally horizontal direction, and a powered lift to raise and lower the loading platform between an uppermost position disposed substantially coplanar with the load level of an associated aircraft, and a lowermost position disposed substantially coplanar with the load level of a raised loading platform of another loading device.

13. A movable aircraft cargo handling apparatus as set forth in claim 12, including:

a second movable aircraft cargo handling device functionally separate from said first movable aircraft cargo handling device.

14. A movable aircraft cargo handling apparatus as set forth in claim 13, wherein:
said second movable aircraft cargo handling device defines another loading device.
15. A movable aircraft cargo handling apparatus as set forth in claim 14, wherein:
said first and second movable aircraft cargo handling devices each include a vehicle.
16. A movable aircraft cargo handling apparatus as set forth in claim 15, wherein:
said first movable aircraft cargo handling device forms an adapter between the aircraft
and said second movable aircraft cargo handling device.
17. A movable aircraft cargo handling apparatus as set forth in claim 16, including:
at least one scissor-type mechanism for raising and lowering said loading platform.
18. A movable aircraft cargo handling apparatus as set forth in claim 17, wherein:
said first movable aircraft cargo handling device includes frame that is displaceable
relative to said loading platform; and includes a transfer bridge displaceable relative to said
frame, and capable of being docked adjacent the aircraft; and including
at least one power mechanism for independently raising and lowering said loading
platform and said transfer bridge, whereby upper surfaces of said loading platform and said
transfer bridge serve for reception of the load to be loaded or unloaded.

19. A movable aircraft cargo handling apparatus as set forth in claim 18, wherein:
said transfer bridge includes telescoping power mechanisms.
20. A movable aircraft cargo handling apparatus as set forth in claim 19, wherein:
said power mechanisms extend and retract said transfer bridge horizontally, tilt to the side with respect to the horizon, and tilt the front edge of said transfer bridge up and down with respect to the horizon.